

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A process for formation of a photoresist-free and antireflective coating (ARC)-free peripheral upper surface portion of a semiconductor substrate adjacent the end edge of said substrate by the steps of:

a) forming an ARC layer on said upper ~~one~~ surface portion of said [a] semiconductor substrate;

b) chemically treating said ARC layer to chemically terminate said ARC layer a first distance from the end edge of said substrate, leaving said ARC layer on said upper surface of said semiconductor substrate with a chemically formed uneven end edge thereon;

c) forming a photoresist layer over said semiconductor substrate and over said ARC layer thereon to completely cover said chemically formed uneven end edge of said ARC layer;
and

d) ~~exposing the peripheral portion of said photoresist layer to a radiation pattern from~~
above said photoresist layer which exposes only the peripheral portion of said photoresist layer larger than said chemically treated ARC layer, followed by;

e) ~~developing development of~~ said exposed peripheral portion of said photoresist layer to remove said exposed peripheral portions of said photoresist layer, and thereby photolithographically terminating terminate said photoresist layer a second distance from said end edge of said substrate wherein said second distance from said end edge of said substrate is smaller than said first distance, from said end edge of said substrate ;

whereby said remaining photoresist layer still completely covers said chemically formed uneven edge of said chemically terminated ARC layer.

2. (original) The process of claim 1 wherein said first distance is at least 1.5 mm from said end edge of said substrate.
3. (original) The process of claim 1 wherein said first distance is less than 3 mm from said end edge of said substrate.
4. (currently amended) The process of claim 2 [1] wherein said second distance is at least 1 mm from said end edge of said substrate.
5. (original) The process of claim 1 wherein said second distance is no greater than at least 0.5 mm less than said first distance.
6. (original) The process of claim 1 wherein said first distance ranges from at least 1.5 mm to less than 3 mm.
7. (original) The process of claim 1 wherein said second distance ranges from at least 1 mm to no greater than 0.5 mm less than said first distance.

8. (currently amended) A process for formation of a photoresist-free and antireflective coating (ARC)-free peripheral upper surface portion of a semiconductor substrate adjacent the end edge of said substrate by the steps of:

- a) forming an ARC layer on one surface of said [a] semiconductor substrate;
- b) chemically treating said ARC layer with a solvent for said ARC layer to chemically terminate said ARC layer, and to chemically form an uneven end edge on said ARC layer a first distance of at least 1.5 mm from the end edge of said substrate;
- c) forming a photoresist layer over said semiconductor substrate and completely over said ARC layer thereon to completely cover said ARC coating and said chemically formed uneven end edge of said ARC layer; ~~and~~
- d) exposing the peripheral portion of said photoresist layer larger than said chemically formed uneven end edge of said ARC layer to a pattern of radiation; ~~and then; followed by~~
- e) developing ~~development of~~ said exposed peripheral portion of said photoresist layer to photolithographically terminate said photoresist layer a second distance of at least 1 mm from said end edge of said substrate wherein said second distance is smaller than said first distance.

9. (cancelled).

10. (original) The process of claim 8 wherein said first distance is less than 3 mm from said end edge of said substrate.

11. (original) The process of claim 8 wherein said second distance is no greater than at least 0.5 mm less than said first distance.

12. (currently amended) A process for formation of a photoresist-free and antireflective coating (ARC)-free peripheral upper surface portion of a semiconductor substrate adjacent the end edge of said substrate by the steps of:

- a) forming an ARC layer on one surface of a semiconductor substrate;
- b) chemically treating said ARC layer with a solvent for said ARC layer to chemically terminate said ARC layer and to chemically form an uneven end edge on said ARC layer a first distance of at least 1.5 mm but less than 3 mm from the end edge of said substrate;
- c) forming a photoresist layer over said semiconductor substrate and over said ARC layer thereon; on to completely cover said ARC coating and said chemically formed uneven end edge of said ARC layer; and
- d) exposing the peripheral portion of said photoresist layer to a pattern of radiation; and
- e) developing followed by development of said exposed peripheral portion of said photoresist layer to photolithographically terminate said photoresist layer a second distance of at least 1 mm, but no greater than at least 0.5 mm less than said first distance, from said end edge of said substrate wherein said second distance is smaller than said first distance and said chemically formed uneven end edge of said ARC layer remains completely covered by said photoresist layer..

13. (original) The process of claim 12 wherein said end edge of said substrate defines any point at the circular edge of said substrate at which a line at a tangent with said circular edge of said substrate is perpendicular to a line lying in the plane of said substrate.